## **ABSTRACT**

A method and a system for separating the phases of a multiphase fluid from one or more wells. The system comprises at least one first gravity separator (3-6) and at least one second gravity separator (3-6), and means for conducting the fluid from the well or wells to the first and second gravity separator(s) (3-6). The system comprises means (15-18, 41-44, 50-53, 54-57) for selectively conducting the fluid to the first and second gravity separators (3-6) either in parallel or in subsequent steps depending on the properties of the fluid and process conditions.

(Fig. 1)

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